19U568

Name: ....

Reg.No: ....

FIFTH SEMESTER B.Sc./B.C.A. DEGREE EXAMINATION, NOVEMBER 2021

(CBCSS - UG)

CC19U BCS5 B07/CC19U BCA5 B07 - COMPUTER ORGANIZATION AND ARCHITECTURE

(Computer Science & Computer Application - Core Course)

(2019 Admission - Regular)

Time : 2.00 Hours

Maximum : 60 Marks

Credit : 3

Part A (Short answer questions)

Answer *all* questions. Each question carries 2 marks.

1. What are the functions of Digital logic?

2. What is a BCD to Decimal decoder?

3. Define clock signal.

4. What do you mean by synchronous and asynchronous counters?

5. What is Instruction set completeness?

6. Why NAND GATE is called Universal gate?

7. What is a Register reference Instruction? Explain the format of the same.

8. What are the various fields in a micro-instruction format.

9. Define Register indirect addressing mode.

10. Define associative memory.

11. What is logical address and physical address?

12. Distinguish magnetic tape and magnetic disk.

(Ceiling: 20 Marks)

Part B (Short essay questions - Paragraph)

Answer *all* questions. Each question carries 5 marks.

13. Write a note on universal gates.

14. What are ripple carry adders ? Explain with neat diagrams.

15. Define shift registers ? Write a note on any two shift registers in detail.

16. Draw the input-output configuration and explain the purposeof INPR and OUTR.

17. Distinguish between Hardwired and Micro-programmed control unit.

18. Explain gereral register organization in CPU with suitable diagram.

19. With a neat diagram, write a note about input-output processor.

(Ceiling: 30 Marks)

Part C (Essay questions)

Answer any *one* question. The question carries 10 marks.

20. What are flip-flops? Write a detailed note on various types of Flip-flops.

21. Write a brief note on Daisy chain and parallel priority interrupt with suitable diagrams.

(1 × 10 = 10 Marks)

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